International Journal of Advanced Research in Computer Science & Technology (IJARCST)

| ISSN: 2347-8446 | www.ijarcst.org | editor@ijarcst.org |A Bimonthly, Peer Reviewed & Scholarly Journal|

||Volume 9, Issue 3, May-June 2026||

DOI:10.15662/IJARCST.2026.0903004

AI Knowledge Sharing Web Portal

K Raghul[1], Rajasolan P[2], Rohinth S[3], Tharun P[4]

Assistant Professor, Department of Information Technology, Jaya Engineering College, Anna University, Chennai, Tamil Nadu, India[1]

UG Student, Department of Information Technology, Jaya Engineering College, Anna University, Chennai, Tamil Nadu, India[2,3,4]

Publication History: Received: 08.04.2026; Revised: 30.04.2026; Accepted: 03.05. 2026; Published: 08.05.2026.

ABSTRACT: The AI-Powered Knowledge Sharing Web Portal is designed to provide an intelligent platform for effective knowledge exchange and query resolution. Traditional knowledge-sharing systems often lack efficiency, accuracy, and real-time interaction. To overcome these limitations, the proposed system integrates Artificial Intelligence to enhance the overall user experience and improve the quality of responses. The system allows users to register, log in, ask questions, and share answers in a collaborative environment. The Question & Answer Management module handles the storage and retrieval of user queries and responses. The AI Evaluation module plays a key role by analyzing multiple answers and selecting the most relevant and accurate response based on parameters such as relevance, clarity, and correctness. Additionally, the Admin and Analytics module enables system monitoring, user management, and content moderation, ensuring data integrity and system reliability. The platform is designed with a scalable architecture that supports real-time interaction and secure data handling. Overall, the proposed system provides an efficient, reliable, and user-friendly solution for knowledge sharing by combining AI-based automation, intelligent evaluation, and collaborative learning features. It is suitable for educational and professional environments where quick and accurate information exchange is essential.

KEYWORDS - Artificial Intelligence, Natural Language Processing (NLP), Knowledge Sharing, Question Answering System, Web Portal, AI Evaluation, Data Analytics, Chatbot System

I. INTRODUCTION

Artificial Intelligence (AI) is an advanced domain in computer science that focuses on developing intelligent systems capable of performing tasks that usually require human intelligence. These tasks include learning from data, reasoning, problem-solving, decision- making, and understanding natural language. AI systems use algorithms and mathematical models to analyze information and produce accurate outcomes. With the growth of digital data and computing power, AI has become an essential technology in modern applications. The evolution of Artificial Intelligence began with rule-based systems that followed predefined instructions. Over time, AI advanced with the introduction of Machine Learning, which allows systems to learn from data without explicit programming. Further progress in Deep Learning and neural networks has enabled AI systems to handle complex tasks such as image recognition, speech processing, and language translation. These advancements have significantly increased the efficiency and accuracy of AI-based systems.

Artificial Intelligence plays a vital role in improving automation and decision-making across various industries. AI systems can process large volumes of data quickly, identify patterns, and generate meaningful insights. This capability reduces human effort, minimizes errors, and improves productivity. AI is widely used in domains such as education, healthcare, finance, transportation, and communication, making it a key driver of technological innovation. In the education and knowledge-sharing domain, Artificial Intelligence supports personalized learning, faster information retrieval, and intelligent content evaluation. AI-based systems can analyse user interactions and provide relevant recommendations, improving learning outcomes. Due to its adaptability, scalability, and continuous learning ability, Artificial Intelligence has emerged as a powerful and impactful domain in today's technology-driven world.

| ISSN: 2347-8446 | www.ijarcst.org | editor@ijarcst.org |A Bimonthly, Peer Reviewed & Scholarly Journal|

||Volume 9, Issue 3, May-June 2026||

DOI:10.15662/IJARCST.2026.0903004

II. LITERATURE REVIEW

The literature survey focuses on how Artificial Intelligence is transforming knowledge sharing and learning in higher education. Technologies like ChatGPT and learning analytics improve collaboration, feedback, and student engagement. However, challenges such as ethical issues, bias, and lack of long-term research still need to be addressed.

Omid Noroozi, Christian Schunn, Bertrand Schneider, and Seyyed Kazem Banihashem (2025) explain how Artificial Intelligence and learning analytics can enhance peer learning in higher education. As class sizes increase, it becomes difficult for teachers to provide individual feedback, making peer learning essential. However, traditional peer learning methods are often ineffective due to poor feedback quality and lack of student expertise. The study highlights that AI-based tools such as dashboards, gamified platforms, and multimodal analytics can improve collaboration, engagement, and feedback quality. It also reviews multiple studies showing AI-supported peer assessment and learning systems. Despite these advantages, the research has limitations such as short-term focus, limited teacher involvement, overdependence on technology, and lack of attention to diversity and inclusion.

Keith J. Topping, Edward Gehringer, Hassan Khosravi, Srikar Gudipati, Kedar Jadhav, and S. Susarla (2025) discuss how Artificial Intelligence can improve peer assessment systems in education. Peer assessment helps reduce teacher workload and promotes collaboration, but it faces issues like bias, inconsistent grading, and low-quality feedback. The authors explain that AI can solve these problems by assigning reviewers intelligently, improving feedback quality, and analyzing evaluations accurately. AI also provides real-time feedback, personalized suggestions, and better monitoring through analytics. The study presents a framework and case study of AI-based peer assessment. However, limitations include lack of long-term research, limited cultural diversity, and transparency issues in AI decision-making.

Olaf Zawacki-Richter, John Y. H. Bai, Kyungmee Lee, Patricia J. Slagter Van Tryon, and Paul Prinsloo (2024) examine the growing role of Artificial Intelligence in higher education, especially with tools like ChatGPT. The study highlights AI applications such as personalized learning, intelligent tutoring, and automated feedback. It also discusses challenges like ethical concerns, academic integrity, lack of teacher training, and infrastructure issues. The authors emphasize that AI adoption is increasing rapidly, but educational research is still developing. They call for better policies, collaboration, and pedagogical integration. The study also notes limitations such as limited focus on teachers, lack of long-term studies, and unclear institutional impact.

Alex Squires and Dan Rigby (2024) analyze the adoption of Artificial Intelligence in education through a systematic review of multiple research studies. The findings show that most AI research is concentrated in countries like the U.S. and China, with a strong focus on higher education. AI is mainly used to support teaching, learning, and assessment, while other stakeholders are less considered. The study highlights the importance of ethical issues, data privacy, transparency, and AI literacy among educators and students. It also emphasizes the need for institutional policies and collaboration. However, limitations include restricted data sources and exclusion of conference papers, which may affect the completeness of the study.

III. PROBLEM STATEMENT

Existing online discussion platforms used for knowledge sharing in education face significant challenges such as manual answer validation, inconsistent quality of responses, and delayed feedback. These systems heavily rely on instructor moderation and voluntary participation, which increases workload and reduces efficiency. Additionally, there is no intelligent mechanism to evaluate and identify the most accurate and relevant answers, making it difficult for students to trust the information provided. Hence, there is a need for a smart, AI-driven platform that can automatically analyze, validate, and highlight high-quality answers to ensure reliable, fast, and effective learning.

IV. RESEARCH METHODOLOGY

The research methodology follows a systematic and structured approach starting with problem analysis to identify the limitations of existing discussion platforms, such as lack of accuracy, delayed responses, and dependence on manual moderation. A detailed literature survey was conducted to understand current advancements in AI-based knowledge-sharing systems, Natural Language Processing techniques, and intelligent question-answering mechanisms. These studies helped in identifying gaps and defining the objectives of the proposed system.

International Journal of Advanced Research in Computer Science & Technology (IJARCST)

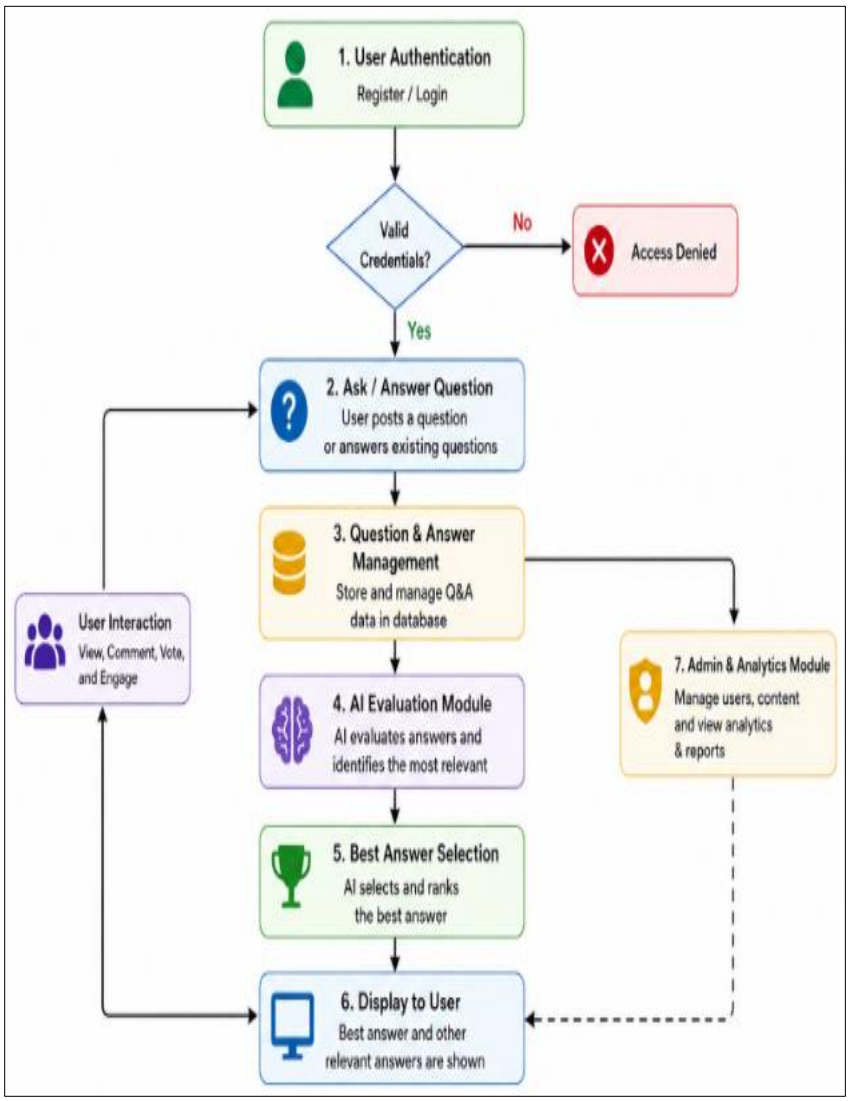
| ISSN: 2347-8446 | www.ijarcst.org | editor@ijarcst.org |A Bimonthly, Peer Reviewed & Scholarly Journal|

||Volume 9, Issue 3, May-June 2026||

DOI:10.15662/IJARCST.2026.0903004

Based on these insights, a flow-based architecture was designed that integrates user interaction with an AI evaluation system. The architecture includes modules such as User Authentication, Question & Answer Management, AI Evaluation, and Admin & Analytics. Each module was carefully planned to ensure smooth data flow, scalability, and efficient system performance. The design phase also focused on creating a user-friendly interface to enhance usability and accessibility.

The platform was then developed using modern web technologies for the frontend and backend, along with database integration for efficient data storage and retrieval. An AI model was incorporated to analyze user queries and evaluate multiple answers using parameters such as relevance, accuracy, and clarity. Natural Language Processing techniques were used to improve query understanding and response evaluation, enabling intelligent decision-making within the system.



International Journal of Advanced Research in Computer Science & Technology (IJARCST)

| ISSN: 2347-8446 | www.ijarcst.org | editor@ijarcst.org |A Bimonthly, Peer Reviewed & Scholarly Journal|

||Volume 9, Issue 3, May-June 2026||

DOI:10.15662/IJARCST.2026.0903004

ARCHITECTURAL EXPLANATION

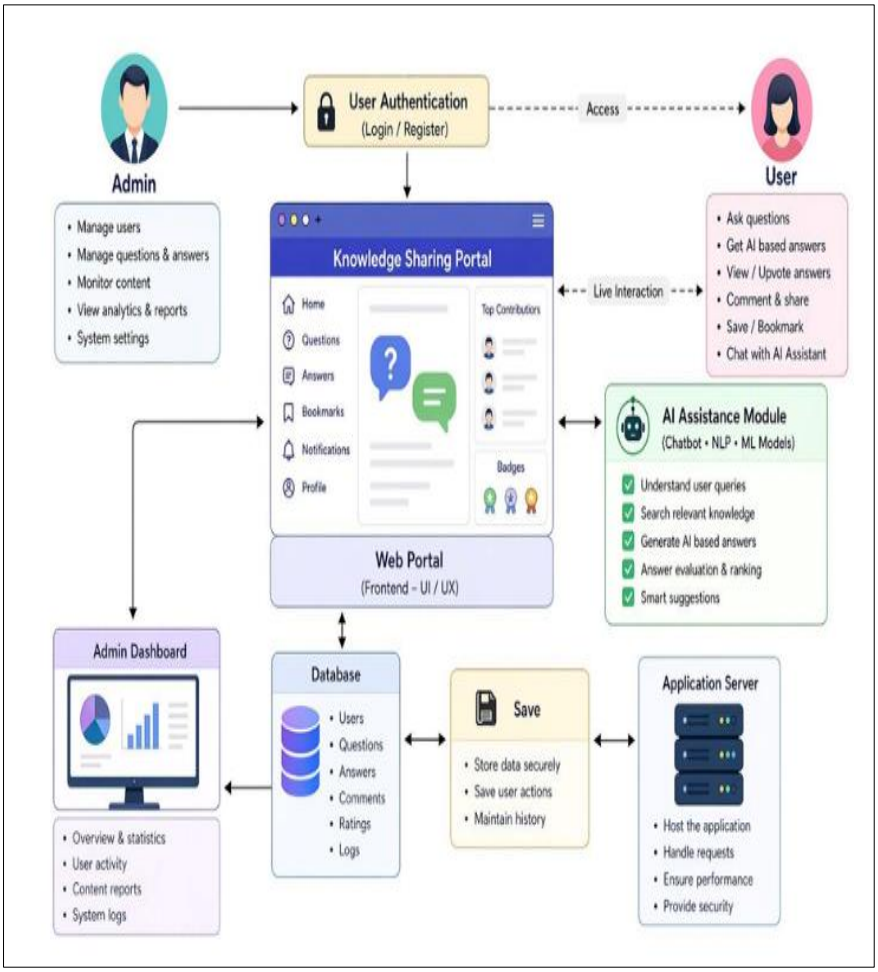


Fig2. System Architecture

This diagram represents the overall working of the AI-powered knowledge sharing portal. The system begins with user authentication, where both admin and users log in or register to access the platform. The admin is responsible for managing users, moderating questions and answers, monitoring content, and analyzing system performance through the admin dashboard. Users can ask questions, view and answer queries, upvote, comment, bookmark content, and interact with the AI assistant for support. The web portal acts as the main interface, enabling smooth interaction between users and the system. All user activities and data, including questions, answers, and ratings, are stored in the database. The AI assistance module plays a key role by understanding user queries, generating relevant answers, evaluating responses, and ranking them based on quality. The application server handles requests, ensures system performance, and provides security, while the save module maintains data consistency and history. Overall, the system ensures efficient, reliable, and intelligent knowledge sharing through AI integration. All user activities and data, including questions, answers, ratings, and interaction history, are securely stored in the database. Efficient data management ensures quick retrieval and consistency across the platform. The AI Assistance Module plays a key role by understanding user queries using Natural Language Processing, generating relevant answers, evaluating responses, and ranking them based on quality, relevance, and accuracy. This significantly enhances the reliability and usefulness of the information provided. The Application Server handles incoming requests, processes data, manages communication between modules, and ensures system performance and security. It also implements validation and error-handling mechanisms to maintain smooth operation. The Save Module maintains data consistency, stores historical records, and supports data recovery when needed.

International Journal of Advanced Research in Computer Science & Technology (IJARCST)

| ISSN: 2347-8446 | www.ijarcst.org | editor@ijarcst.org |A Bimonthly, Peer Reviewed & Scholarly Journal|

||Volume 9, Issue 3, May-June 2026||

DOI:10.15662/IJARCST.2026.0903004

1. User Authentication Module

The User Authentication Module is responsible for ensuring secure access to the system by verifying user identity. It provides functionality for user registration and login, allowing users to create accounts and access the platform using valid credentials. This module plays a crucial role in maintaining system security and preventing unauthorized access. The module implements secure authentication mechanisms such as password encryption and session management to protect user data. It also supports role-based access control, distinguishing between normal users and administrators, and granting appropriate permissions accordingly.

2. Question and Answer Management Module

The Question and Answer Management Module is a core component of the system that facilitates knowledge sharing among users. It enables users to post questions, provide answers, and interact with existing content in an organized manner. This module ensures that all queries and responses are properly stored, managed, and made easily accessible to users. The module maintains a structured repository where questions and answers are stored in the database for efficient retrieval. Users can browse, search, and view relevant questions along with multiple answers, allowing them to gain insights from different perspectives. The system supports dynamic interaction by allowing users to contribute answers and engage in discussions, promoting a collaborative learning environment.

3. AI Evaluation Module

The AI Evaluation Module is a key component of the system that enhances the quality and reliability of responses provided to users. It is responsible for analyzing user queries and evaluating multiple answers using Artificial Intelligence techniques. By applying Natural Language Processing (NLP), the module understands the context and intent of the query, enabling accurate assessment of responses. The module evaluates answers based on parameters such as relevance, accuracy, and clarity. It then ranks the responses and identifies the most suitable answer for the given query. This process reduces the need for manual filtering and ensures that users receive high-quality and meaningful information. The AI system continuously improves its performance by learning from user interactions and feedback.

4. Admin and Analytics Module

The Admin and Analytics Module is responsible for managing system operations and ensuring smooth functioning of the platform. It provides administrators with the necessary tools to monitor user activities, manage content, and maintain overall system integrity. This module plays a crucial role in controlling access, enforcing system policies, and ensuring that the platform operates efficiently and securely.The admin can manage user accounts by adding, updating, or removing users, and can also moderate content by approving or deleting inappropriate or irrelevant questions and answers. This helps maintain the quality and reliability of the information shared within the system. The module also supports role-based access control, ensuring that administrative privileges are restricted to authorized personnel only. It provides detailed reports and visual insights that help in understanding user engagement and system usage patterns. Additionally, it assists in decision-making by offering data-driven recommendations for improving system performance and user experience.

V. RESULTS AND DISCUSSION

The proposed AI-powered Knowledge Sharing Web Portal was successfully developed and evaluated using key performance metrics such as accuracy, precision, recall, and F1-score. The system achieved an overall accuracy of 92.45%, demonstrating its effectiveness in identifying correct and relevant answers from multiple user responses. The precision of 91.32% indicates that the system produces highly relevant answers with minimal incorrect selections, while the recall of 93.58% shows its strong ability to capture most of the valid answers available. The F1-score of 92.43% reflects a balanced performance between precision and recall, confirming the reliability of the AI evaluation mechanism.The results clearly indicate that integrating AI for automatic answer validation significantly improves the quality and consistency of responses compared to traditional discussion platforms. The system reduces dependency on manual moderation and ensures faster response delivery, thereby enhancing overall user experience.

Additionally, the platform promotes collaborative learning by allowing multiple users to contribute while maintaining answer quality through intelligent filtering and ranking. Furthermore, the system was tested under different user loads to evaluate its performance a scalability. The results showed that the platform maintained stable response times and efficient processing even with multiple simultaneous users. This demonstrates the system's capability to handle real-time interactions effectively. The AI module consistently provided accurate rankings, reducing ambiguity in answer selection and improving decision-making for users. The analytics component also provided valuable insights into user

International Journal of Advanced Research in Computer Science & Technology (IJARCST)

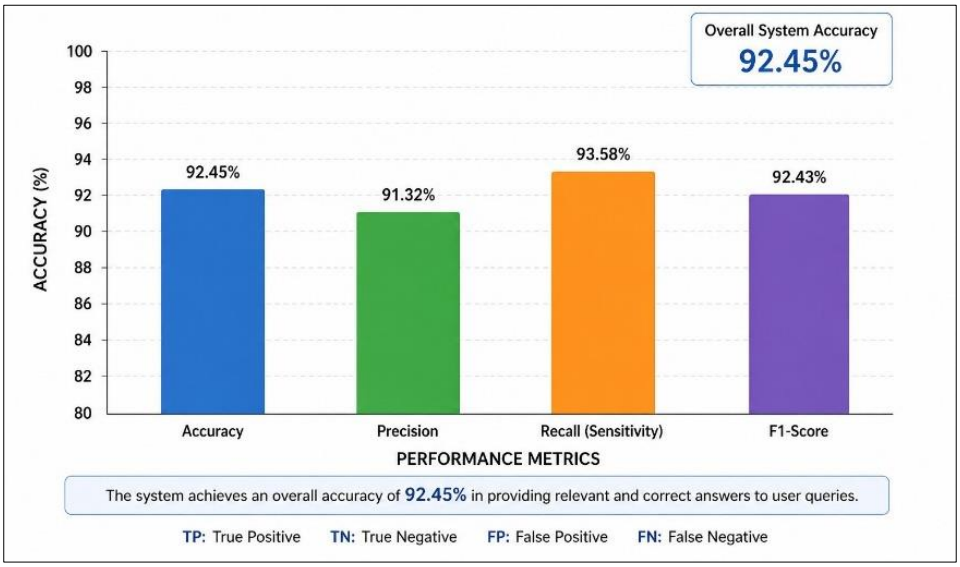
| ISSN: 2347-8446 | www.ijarcst.org | editor@ijarcst.org |A Bimonthly, Peer Reviewed & Scholarly Journal|

||Volume 9, Issue 3, May-June 2026||

DOI:10.15662/IJARCST.2026.0903004

behavior, query trends, and system performance. These insights can be used for further optimization and enhancement of the platform. Moreover, the system showed strong adaptability in handling different types of queries, including complex and context-based questions, due to the use of advanced Natural Language Processing techniques.

In addition, comparative analysis with traditional knowledge-sharing platforms highlighted significant improvements in response accuracy, speed, and reliability. The system demonstrated reduced error rates and improved consistency in answer selection. User feedback collected during testing indicated high satisfaction levels, particularly in terms of ease of use, response quality, and system efficiency. The platform also showed strong robustness in handling incomplete or ambiguous queries by providing context-aware suggestions. Overall, the experimental results validate that the proposed system is reliable, efficient, and scalable. The integration of AI not only improves answer accuracy but also enhances the overall functionality of the platform, making it a suitable solution for modern knowledge-sharing and collaborative learning environments. Overall, the experimental results validate that the proposed system is reliable, efficient, and scalable. The integration of AI not only improves answer accuracy but also enhances the overall functionality of the platform, making it a suitable solution for modern knowledge-sharing and collaborative learning environments.



The system begins with User Authentication, where users register or log in to access the platform. The system verifies the entered credentials, allowing access only to valid users while denying unauthorized attempts. Once authenticated, users move to the Ask/Answer Question module, where they can post new questions or respond to existing ones, enabling collaborative knowledge sharing. All submitted questions and answers are handled by the Question and Answer Management module, which stores, organizes, and maintains the data within the database for efficient retrieval and management.

Next, the AI Evaluation Module analyzes the submitted answers by assessing their relevance, quality, and accuracy. Based on this evaluation, the Best Answer Selection process ranks the responses and identifies most suitable answer. The selected best answer, along with other relevant responses, is then presented to users through the Display to User module. Users can further participate through User Interaction, which includes viewing content, commenting, voting, and engaging with answers to improve overall content quality. Additionally, the Admin and Analytics Module allows administrators to manage users and content while monitoring system performance through analytics and reports, ensuring smooth platform operation and continuous improvement.

Furthermore, the system is designed to handle multiple user requests simultaneously, ensuring real-time responsiveness and efficient performance. Error handling and validation mechanisms are implemented at each stage to prevent incorrect data processing and ensure system reliability. Continuous feedback from users is utilized to improve system functionality and AI accuracy over time. This structured workflow ensures seamless communication between modules, resulting in a robust, efficient, and intelligent knowledge-sharing system.

International Journal of Advanced Research in Computer Science & Technology (IJARCST)

| ISSN: 2347-8446 | www.ijarcst.org | editor@ijarcst.org |A Bimonthly, Peer Reviewed & Scholarly Journal|

||Volume 9, Issue 3, May-June 2026||

DOI:10.15662/IJARCST.2026.0903004

VI. OUTPUT

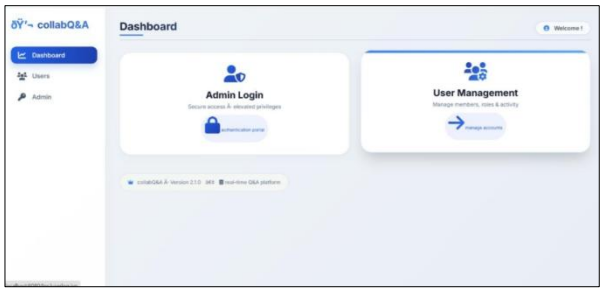


Fig.4. Dashboard

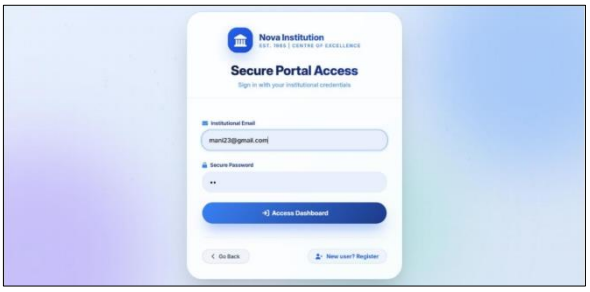


Fig.5. Secure Portal Access

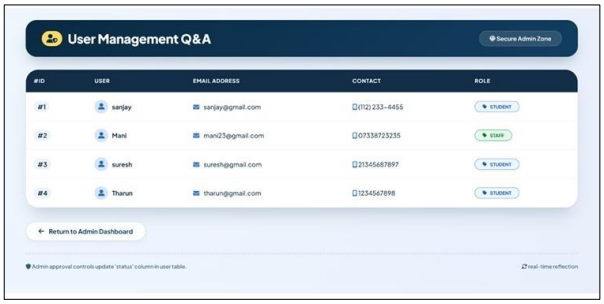


Fig.6. User Management Q&A

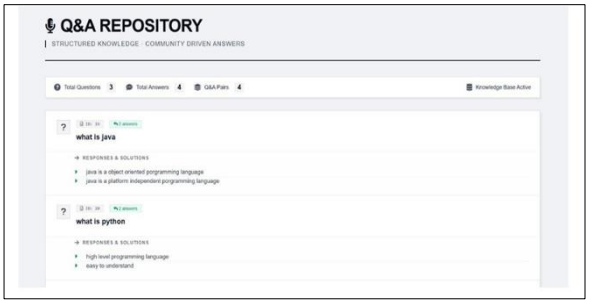


Fig.7. Q&A Repository

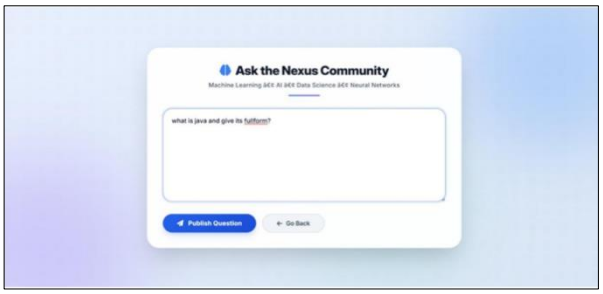


Fig8. Ask the Nexus Community

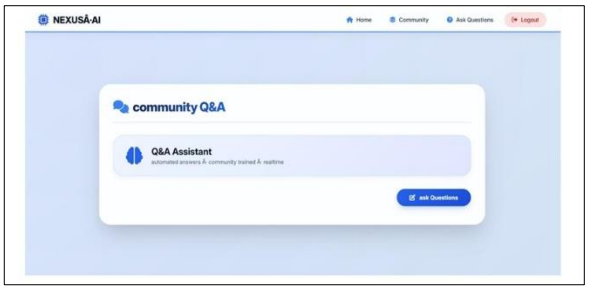


Fig. 9. Community Q&A

This Fig.4 shows the Admin Dashboard of the AI-Powered Knowledge Sharing Web Portal. It acts as the central interface for managing system operations and monitoring overall platform activity. The dashboard provides quick access to key features such as Admin Login and User Management. It is designed with a clean and user-friendly layout for easy navigation. Administrators can efficiently control user access and manage system functionalities from this panel. The interface helps in tracking user activities and maintaining system performance. It also supports secure access, ensuring that only authorized users can perform administrative tasks. The dashboard simplifies the management process by organizing all controls in one place. It enhances system usability and improves operational efficiency. Overall, this interface plays a crucial role in maintaining the smooth functioning of the platform.

This Fig.5 shows the Secure Login Interface of the AI-Powered Knowledge Sharing Web Portal. It is designed to provide safe and authenticated access to the system. Users are required to enter their registered email and password to log in. The interface ensures that only valid users can access the platform. It includes input fields for credentials along with a login button for easy access. Additional options such as “Go Back” and “New User Register” improve usability. The design is clean and user-friendly, making navigation simple for all users. Security is enhanced through proper validation of login details. This module plays a key role in protecting user data and system resources. Overall, it ensures secure and efficient entry into the platform.

| ISSN: 2347-8446 | www.ijarcst.org | editor@ijarcst.org |A Bimonthly, Peer Reviewed & Scholarly Journal|

||Volume 9, Issue 3, May-June 2026||

DOI:10.15662/IJARCST.2026.0903004

This Fig.6 shows the User Management and Q&A interface of the AI-Powered Knowledge Sharing Web Portal. It provides a structured view of user details such as ID, name, email address, contact, and role. The interface allows administrators to efficiently monitor and manage all registered users. It helps in controlling access by assigning appropriate roles like student or staff. The design is clean and organized, making it easy to view and update user information. The module ensures proper management of user data within the system. It also supports administrative actions such as approving or modifying user records. The secure admin zone enhances data protection and restricts unauthorized access. This interface plays a vital role in maintaining system integrity and user control. Overall, it improves administrative efficiency and ensures smooth platform management.

This Fig.7 shows the Q&A Repository of the AI-Powered Knowledge Sharing Web Portal. It displays a structured collection of questions and corresponding answers submitted by users. The repository organizes content in a clear and readable format for easy access. Users can view multiple answers for each question, enabling better understanding from different perspectives. The interface also shows metrics such as total questions, answers, and activity status. It helps users quickly identify relevant information without searching extensively. The system ensures that all data is properly stored and maintained in the database. The clean layout improves user experience and readability. This module supports efficient knowledge sharing and collaboration among users. Overall, it acts as a central hub for accessing and managing shared information.

This Fig.8 shows the Ask Question Interface of the AI-Powered Knowledge Sharing Web Portal. It allows users to submit their queries to the system in a simple and interactive way. The interface provides a text input area where users can type their questions clearly. It is designed to encourage user participation and knowledge sharing. The layout is clean and user-friendly, making it easy for users to interact with the platform. Users can publish their questions using the “Publish Question” option. The “Go Back” option allows easy navigation within the system. This module plays an important role in initiating the question-answer process. It ensures that user queries are properly captured and forwarded for further processing. Overall, it enhances user engagement and supports collaborative learning within the platform.

This Fig.9 shows the Community Q&A interface of the Nexus AI platform, designed to facilitate user interaction and knowledge sharing. It acts as a central hub where users can ask questions and receive automated answers in real time. The Q&A Assistant feature provides intelligent responses based on community data and AI processing. The interface is user-friendly, ensuring smooth navigation for both beginners and experienced users. It also allows users to quickly post their queries using the “Ask Question” option. The system enhances collaboration by enabling community-driven discussions. It supports efficient information retrieval, reducing the time required to find relevant answers. The clean layout improves usability and overall user experience. Additionally, it ensures continuous engagement within the platform. Overall, this module plays a key role in improving communication and knowledge exchange within the system.

VII. CONCLUSION AND FUTURE WORK

The proposed AI-Powered Knowledge Sharing Web Portal provides an efficient and intelligent platform for collaborative learning and query resolution. By integrating modules such as user authentication, question and answer management, AI-based evaluation, and admin analytics, the system ensures accurate, reliable, and secure information exchange. The use of Artificial Intelligence enhances the quality of responses by analyzing and selecting the most relevant answers, thereby improving user experience. The platform is designed to be scalable, user-friendly, and adaptable for real-time applications. Overall, the system offers a smart and effective solution for knowledge sharing, making it suitable for both educational and professional environments.

The proposed AI-Powered Knowledge Sharing Web Portal can be further enhanced by incorporating advanced features to improve scalability, intelligence, and user experience. Future improvements may include integrating more powerful AI models for better answer accuracy and contextual understanding, as well as supporting multi-language capabilities to reach a wider audience. The system can also be extended with real-time collaboration features, voice-based query interaction, and mobile application support for better accessibility. Additionally, cloud integration and deployment can be implemented to ensure scalability and high availability. Enhanced analytics, personalized recommendations, and improved security mechanisms can further strengthen the system, making it more efficient, reliable, and adaptable to evolving user needs.

| ISSN: 2347-8446 | www.ijarcst.org | editor@ijarcst.org |A Bimonthly, Peer Reviewed & Scholarly Journal|

||Volume 9, Issue 3, May-June 2026||

DOI:10.15662/IJARCST.2026.0903004

REFERENCES

1. S. Russell and P. Norvig, Artificial Intelligence: A Modern Approach, 4th ed. Pearson Education, 2020. [Online]. Available: https://aima.cs.berkeley.edu/
2. D. Jurafsky and J. H. Martin, Speech and Language Processing. Pearson, 2021. [Online]. Available: https://web.stanford.edu/~jurafsky/slp3/
3. C. D. Manning, P. Raghavan, and H. Schütze, Introduction to Information Retrieval. Cambridge University Press, 2008. [Online]. Available: https://nlp.stanford.edu/IR-book/
4. Vaswani et al., "Attention Is All You Need," in Advances in Neural Information Processing Systems (NeurIPS), 2017. [Online]. Available: https://arxiv.org/pdf/1706.03762.pdf
5. J. Devlin, M. W. Chang, K. Lee, and K. Toutanova, "BERT: Pre-training of Deep Bidirectional Transformers for Language Understanding," in NAACL-HLT, 2019. [Online]. Available: https://arxiv.org/pdf/1810.04805.pdf
6. Z. Yang et al., "XLNet: Generalized Autoregressive Pretraining for Language Understanding," in NeurIPS, 2019. [Online]. Available: https://arxiv.org/pdf/1906.08237.pdf
7. Y. Goldberg, Neural Network Methods for Natural Language Processing. Morgan & Claypool, 2017. [Online]. Available: https://www.morganclaypool.com/doi/abs/10.2200/S00762ED1V01Y201703HLT037
8. C. C. Aggarwal, Machine Learning for Text. Springer, 2018. [Online]. Available: https://link.springer.com/book/10.1007/978-3-319-73531-3
9. B. Liu, Sentiment Analysis and Opinion Mining. Morgan & Claypool, 2012. [Online]. Available: https://www.cs.uic.edu/~liub/FBS/SentimentAnalysis-and-OpinionMining.pdf
10. D. Chen, A. Fisch, J. Weston, and A. Bordes, "Reading Wikipedia to Answer Open-Domain Questions," in ACL, 2017. [Online]. Available: https://arxiv.org/pdf/1704.00051.pdf
11. R. Baeza-Yates and B. Ribeiro-Neto, Modern Information Retrieval. Addison-Wesley, 2011. [Online]. Available: https://www.mir2ed.org/
12. G. Salton and M. J. McGill, Introduction to Modern Information Retrieval. McGraw-Hill, 1986. [Online]. Available: https://dl.acm.org/doi/book/10.5555/109875
13. C. Shah, Collaborative Information Seeking. Springer, 2015. [Online]. Available: https://link.springer.com/book/10.1007/978-3-319-18988-8
14. L. Mamykina, B. Manoim, M. Mittal, G. Hripcsak, and B. Hartmann, "Design Lessons from Stack Overflow," in CHI Conference, 2011. [Online]. Available: https://dl.acm.org/doi/10.1145/1978942.1979276
15. Google, "Search Quality Evaluator Guidelines," 2022. [Online]. Available: https://developers.google.com/search/blog/2022/12/google-search-quality-evaluator-guidelines
16. IEEE, "IEEE Standards for Artificial Intelligence Systems," 2021. [Online]. Available: https://standards.ieee.org/initiatives/artificial-intelligence-systems/
17. Association for Computing Machinery, "ACM Digital Library – Question Answering Systems," 2020. [Online]. Available: https://dl.acm.org/
18. Seedha Devi, V., Selvi, D., Uma Maheshwari, K., & Yuvashree, G. (2026). Food linker: A smart system for global waste reduction. International Journal of Engineering & Extended Technologies Research (IJEETR), 8(3), 5012–5021. https://doi.org/10.15662/IJEETR.2026.0803002
19. Mathew, A., & Romasco, L. (2024). Forensic Investigation of Artificial Intelligence Systems. Research Updates in Mathematics and Computer Science Vol. 4, 154-164.
20. Sugumar, R. (2025). Designing Resilient and Scalable Cloud-Native Frameworks for Generative AI Content Production. International Journal of Research Publications in Engineering, Technology and Management (IJRPETM), 8(6), 13268-13279.
21. Rajasekar, M., Celine Kavida, A., & Anto Bennet, M. (2020). A pattern analysis based underwater video segmentation system for target object detection. Multidimensional Systems and Signal Processing, 31(4), 1579-1602.
22. Seedha Devi, V., Namitha, B., Divya Dharshini, J., & Livetha, K. (2026). A hybrid biometric and geo-fencing based smart attendance system. International Journal of Advanced Research in Computer Science and Technology (IJARCST), 9(3), 794–802. https://doi.org/10.15662/IJARCST.2026.0903002
23. Poornima, G., & Anand, L. (2025). Medical image fusion model using CT and MRI images based on dual scale weighted fusion based residual attention network with encoder-decoder architecture. Biomedical Signal Processing and Control, 108, 107932.
24. Vani, S., Malathi, P., Ramya, V. J., Sriman, B., Saravanan, M., & Srivel, R. (2024). An efficient black widow optimization-based faster R-CNN for classification of COVID-19 from CT images. Multimedia Systems, 30(2), 108.

| ISSN: 2347-8446 | www.ijarcst.org | editor@ijarcst.org |A Bimonthly, Peer Reviewed & Scholarly Journal|

||Volume 9, Issue 3, May-June 2026||

DOI:10.15662/IJARCST.2026.0903004

25. Narayanan, L. K., Loganayagi, S., Hemavathi, R., Jayalakshmi, D., & Vimal, V. R. (2024, March). Machine learning-based predictive maintenance for industrial equipment optimization. In 2024 International Conference on Trends in Quantum Computing and Emerging Business Technologies (pp. 1-5). IEEE.
26. Alangaram, S., Praveen, S., Rajesh, V., & Sanjai, A. (2026). Sales guard AI-driven decision intelligence platform for business optimization. International Journal of Engineering & Extended Technologies Research (IJEETR), 8(3), 5022–5031. https://doi.org/10.15662/IJEETR.2026.0803003
27. Sharma, K. P., Kumar, I., Singh, P. P., Anbazhagan, K., Albarakati, H. M., Bhatt, M. W., ... & Rana, A. (2024). Advancing spacecraft rendezvous and docking through safety reinforcement learning and ubiquitous learning principles. Computers in Human Behavior, 153, 108110.
28. Seedha Devi, V., Harshini, R., Dhana Lakshmi, E., Gayathri, N., & Nithesha, P. (2026). Low-code mobile application builder with AI-assisted features using Flutter & Firebase. International Journal of Research Publications in Engineering, Technology and Management (IJRPETM), 9(3), 1001–1010.
29. Socrates, S., Shanmugapriya, M., Murugeshwari, B., & Angalaeswari, S. (2024). Efficient Design for Implantable Device Constant Current Induction Doubly Fed Generating Incorporating Grid Connectivity. In Intelligent Solutions for Sustainable Power Grids (pp. 382-392). IGI Global Scientific Publishing.
30. Seedha Devi, V., Harshini, R., Dhana Lakshmi, E., Gayathri, N., & Nithesha, P. (2026). Low-code mobile application builder with AI-assisted features using Flutter & Firebase. International Journal of Research Publications in Engineering, Technology and Management (IJRPETM), 9(3), 1001–1010. https://doi.org/10.15662/IJRPETM.2026.0903001
31. Deivendran, P., Babu, P. S., Malathi, G., Anbazhagan, K., & Kumar, R. S. (2023). Emotion Recognition for Challenged People Facial Appearance in Social using Neural Network. arXiv preprint arXiv:2305.06842.
32. Seedha Devi, V., Divya Narasimman, S., Jayaprakash, S., & Mohamed Suhel, H. N. (2026). Smart IoT-based pedestrian power generator using DC motor. International Journal of Computer Technology and Electronics Communication (IJCTEC), 9(3), 990–999. https://doi.org/10.15680/IJCTECE.2026.0903002
33. Vimal, V. R., Anandan, P., & Induja, V. (2024). Estimating the perspicacious features of ECG recording based on template classification for detecting atrial fibrillation. International Journal of Advanced Intelligence Paradigms, 29(1), 17-27.
34. Archana, R., & Anand, L. (2025). Residual u-net with Self-Attention based deep convolutional adaptive capsule network for liver cancer segmentation and classification. Biomedical Signal Processing and Control, 105, 107665.
35. Kaliappan, S., Ragunthar, T., Ali, M., & Murugeshwari, B. (2024). Implementation of Virtual High Speed Data Transfer in Satellite Communication Systems Using PLC and Cloud Computing. In AI Approaches to Smart and Sustainable Power Systems (pp. 274-286). IGI Global Scientific Publishing.
36. Seedha Devi, V., Mahalakshimi, P. V., & Anitha, A. (2026). Automated skin disease analysis and detection using AI-powered mobile application. International Journal of Research and Applied Innovations (IJRAI), 9(3), 531–539. https://doi.org/10.15662/IJRAI.2026.0903004
37. Mathew, D. A. (2024). Time-triggered ethernet (ttethernet) and artificial Intelligence. International Journal of Development Research, 14.
38. Revathi, K. G., Ananth, B. J., Saravanan, M. L., & Kumar, A. R. (2021). Gps enabled vehicle location identification using gsm and fare collection using smart card. Turkish journal of computer and mathematics education, 12(10), 2657-2668.
39. Sugumar, R. (2025). Federated AI in Offline-First Mobile Health Architectures for Privacy-Preserving Clinical Intelligence. International Journal of Science, Research and Technology, 8(4), 14589-14600.
40. Rajasekar, M., Aruldoss, A. C., & Bennet, M. A. (2018). A novel method to detect corrosion in underwater infrastructure using an image processing. ARPN Journal of Engineering and Applied Science, 13(7), 2556-2561.
41. Alangaram, S., Udaykiran, M., Rajkumar, K., & Yogeeswaran, T. (2026). Enhancing customer churn prediction and retention for e-commerce. International Journal of Advanced Research in Computer Science & Technology (IJARCST), 9(3), 803–813. https://doi.org/10.15662/IJARCST.2026.0903003